



NORTH HENDERSON CSO REDUCTION PROJECT COMMUNITY WORKSHOP #1

**November 18, 2010
6:00-8:00 p.m.**

**Rainier Community Center
4600 38th Avenue S, Seattle**

OVERVIEW

Combined sewer overflows (CSOs) happen when pipes that carry both sewage and stormwater overflow into our waterways during heavy rain. Seattle Public Utilities is working to control CSOs throughout Seattle to protect property, human health and the environment and to comply with state and federal regulations.

Combined sewer overflows (CSOs) happen up to 17 times year in the North Henderson basins, on average. In 2009, the outfalls in North Henderson overflowed 27 times, pouring 8.5 million gallons of combined sewage and stormwater into Lake Washington. The overflows happened after as little as one-half inch of rain.

The North Henderson Project will reduce the amount of untreated sewage and polluted stormwater that is overflowing into Lake Washington combined sewer overflow outfalls near Seward Park (CSO Outfall #44) and Martha Washington Park (CSO Outfall #45).

EVENT DESCRIPTION

On Thursday, November 18, 2010 from 6:00 - 8:00 p.m., SPU hosted the first of three community workshops to inform the planning and site selection phase of the project. Approximately 14 people attended. The purpose of the workshop was to provide participants with the opportunity to:

- Learn about methods to reduce CSOs
- Explore the options
- Ask questions and provide input

SPU will use the community input generated at the workshop to identify a shortlist of alternatives that reflect community preferences.

Public Notification

SPU advertised the workshop through a variety of methods including the North Henderson project website, a postcard announcement mailed to approximately 1,700 households in the North Henderson basins and to about 100 people representing organizations that have reserved facilities in Seward Park over the last three years, a posting on the City's online public outreach and engagement calendar, a meeting advertisement in the Rainier Valley Post, two messages to the North Henderson listserv, and by delivering meeting flyers to gathering places throughout the project area, including community centers, libraries, and post offices.

Format

At the beginning of the workshop, participants signed in as they arrived and SPU staff informed them of the workshop purpose and agenda. Each participant received a project fact sheet and a comment form. After signing in, SPU staff encouraged participants to review display boards with information describing what a combined sewer overflow is, how SPU is addressing CSOs throughout Seattle, specific information about the North Henderson basins, and a project timeline highlighting upcoming public involvement opportunities.

SPU staff gave a 15-minute presentation to provide background on the CSO program and information on the purpose and need for the North Henderson project. Participants then broke into small groups to visit four stations containing information about the methods SPU is evaluating for controlling CSOs in the North Henderson basins: storage, flow transfer, separation and wet weather treatment. The breakout stations were designed to assure participants had a thorough understanding of the four CSO control methods under consideration and to provide the opportunity to ask questions. A representative of the technical team gave a brief presentation and responded to participant questions. A scribe documented comments and questions on easel pads.

At approximately 7:30 p.m. participants reconvened and the technical lead from each station reported on the key points heard from participants during the small group breakout session. At the conclusion of the report out, CSO Program Manager Andrew Lee led a question and answer session with participants.

COMMENT SUMMARY

The following highlights feedback from workshop participants in regard to each of the CSO technical options at North Henderson: storage, flow transfer, separation and treatment.

Participants provided feedback about each option as they rotated through a series of four stations in small breakout groups.

Overall Themes

- Participants would like to see more creative, aggressive approaches that incorporate residential participation in green stormwater solutions.
- Participants indicated that SPU's participation estimates in green stormwater solutions may be too conservative.
- Many were generally interested in cost and the differences between the options.
- Participants were concerned about the size of pumps and pipes for the flow transfer option as well as potential risks.
- With the storage option, participants were interested in issues related to odor control and seismic considerations.
- Participants also wanted more information about operations and construction factors for the storage option, including the size of the tank and how groundwater is addressed.
- Participants asked questions about residential incentives for implementing green stormwater solutions.
- Some were concerned about whether there was a true need for a treatment option at the site and potential impacts to Seward Park. Participants also asked whether treatment could help with both CSO and stormwater pollutant loading to Lake Washington.

Feedback on CSO Options

Station #1: Storage

Participants were generally interested in the practical considerations of the storage tank and asked questions about its size, function, and constructability.

- *How much does it hold and what is the size of the pipe and tank?*
- *How long is water in the tank?*
- *Is there an overflow mechanism with the storage option?*
- *Would this store stormwater and sewage?*
- *What treatment plant would stored water go to?*

- *What are maintenance requirements?*
- *How often do you clean the tank?*
- *How deep is the tank?*
- *If under the street – would it be a pipe instead of a box?*
- *Can you build under private property?*
- *How much experience does SPU have with building these?*
- *Are there examples nearby we can visit?*

Some were concerned about noise and odor impacts and how it would be controlled and managed.

- *How loud is it? This would have big impact in the parks.*
- *Why are odor control stacks needed?*
- *How far away do you site odor control?*

Another issue raised was how a storage option may be affected by an earthquake or seismic activity.

- *What are seismic considerations?*
- *How stable is the tank? (earthquakes)*

Participants were also interested in potential impacts to groundwater and ways SPU would manage these impacts.

- *How do you prevent ground water from getting into the tank during construction?*
- *How do you manage, deal with building so close to water table?*
- *Is there a chance of sewage and untreated stormwater migrating into groundwater?*

Participants also raised questions about costs.

- *What is cheapest shape tank to build?*
- *Cost difference of a storage tunnel vs. storage tank?*
 - *To build?*
 - *To operate/maintain?*

Station #2: Flow Transfer

Participants were interested how SPU would handle potential challenges with flow transfer and the reasoning behind its technical specifications.

- *Why would the pump need to be so large?*
- *Wouldn't the current 6-ft easement for 15-ft lake line be enough to construct 30 ft pipeline? Would need 24-ft.*
- *What happens to pumping during a power outage?*
- *What would happen with high-pressure pumps?*
- *Can't you just transfer to Pump Station #10 (Martha Washington Park)?*
- *Why show all of these options?*
- *Isn't storage where you landed?*
- *If failure, then it would have a 100-ft geyser of sewage, stormwater.*
- *Once transferred you still need to store it somewhere, must coordinate with County.*

Many questions focused on the cost of this option and concerns about the higher cost of the transfer option.

- *Have you costed out using private property?*
- *What is the cost of the North Henderson solution?*
- *It's cheaper to use storage because conveyance would not have to handle maximum volume (plus storage still needed).*
- *Who pays for these projects?*
- *Transfer seems too expensive.*

Some were interested in existing capacity and wanted more information about size considerations and how flow transfer compared to other solutions.

- *How big would the pump station be?*
- *How does a conveyance pipeline compare to the size of a storage pipeline?*
- *Must size pump station & pipeline for maximum volume & still store it somewhere.*
- *A 15-ft lake line would need to be upsized to 30 ft.*
- *The current system has capacity to handle "normal" flow volume (dry or light rain).*
- *In the 1930s – Lake line not sized very large (15-18 ft.)*
- *Would need to be 30 ft to handle current volume.*

Station #3: Separation

Participants were interested in the role of residential participation with this option and potential incentives to increase participation.

- *What do the residential incentives look like?*
- *What are participation assumptions?*
- *Under RainWise, would residents be responsible for only their own stormwater?*
- *What did you find out from the Lakewood Rain Catcher project about residential requirements & cisterns?*

Some offered additional considerations and ideas for potential solutions.

- *Would roadside requirements be useful where there are already tree plantings?*
- *Why couldn't you put a large rain garden in Seward Park to take the flows from the combined streets?*
- *Can we have a model run that removes participation & considers only the feasibility of controlling residential volume with a green solution at a removed location (i/e Seward Park)?*

Participants had questions about how treatment would be handled with the separation option.

- *How much of the rooftop water and combined streets would be treated at a centralized green solution?*
- *Separation also requires treatment to preserve water quality.*
- *What streets are separated?*

Station #4: Wet Weather Treatment

Some questioned the need for the wet weather treatment option and were concerned about how it would integrate in the Seward Park neighborhood.

- *Treatment is overkill for Basin 45.*
- *Treatment doesn't seem to enhance Seward Park.*
- *This kind of facility doesn't belong in a park.*
- *This seems preposterous.*

Participants also asked about the cost of treatment and how it compared to other options.

- *Long-term maintenance cost?*
- *What is the cost of treatment compared to others?*

Others were generally interested in how treatment works and whether it could treat storm water, in addition to other potential approaches.

- *Are we planning to keep those areas that are separated, separated?*
- *Could the treatment also deal with stormwater (separated already) in the basin?*
- *Can treatment also treat stormwater?*
- *Is there a comprehensive approach to handling stormwater and sewer together?*
- *Other cities have “Do it yourself” CSO solutions, what is Seattle doing?*
- *Are there treatment plants (wet weather) being constructed in other parts of the city?*
- *Can you do combinations of these options?*
- *Doesn’t seem like all the excess could be from leakage?*
- *Would the city be interested in helping homeowners repair side-sewers?*

Other Comments

Participants provided additional comments and questions following a report-out presentation from each of the break-out session staff leads. The following comments and questions are organized by topic.

Residential participation

- *Have you considered a feasibility study for what it would take to make property owners responsible for their own stormwater drainage?*
- *Would one type of incentive be a tax break?*
- *Why were people able to build over the line without DPD calling it into question?*
- *What would it take to have everyone seal their side sewers?*
- *Would disconnecting roof down spouts get us to a solution?*
- *Can we reduce normal wastewater flow from our households to address the problem?*
- *Can you target the local solution (e.g. everyone stop using their drains during a storm to prevent CSO)?*

Treatment

- *If everything was pumped to a treatment station, would we be able to get out everything that is polluting the Sound? How much can we treat out?*
- *What is the possibility of combining CSO & stormwater treatment?*

Storage

- *Negative aspects of storage option*
 - *Treating combined water, so paying forever to treat both*
 - *Is there another way to decentralize the system to apply GSI more broadly*
 - *Could the system separate storm from sewer so stormwater could be used for toilets, gardens*
- *Conceptually: tax/rate payers paying forever for the storage solution, & property owners are responsible for maintaining their own line?*

Other options

- *Participants would like to see more creative, aggressive approaches*
 - *Private property improvements*
 - *Creative approaches to wet weather treatment*
- *Do something that won't require replacement again in 50-80 yrs. Use storage and a small treatment plant for separated stormwater only.*
- *Can we be aggressive and find more creative ways to address this?*

Written Comment Summary

Participants were also encouraged to submit comments using the participant comment forms provided. In the comment form, participants were asked to respond to specific questions about community values and concerns. A total of three comment forms were submitted. Following is a summary of comments provided as of December 1, 2010.

As SPU selects a site for constructing its CSO reduction project in the North Henderson area, what are the most important values or concerns for SPU to consider? Please check all that apply:

Criterion	Number of Responses
Preserve current use of park and character of park design	3
Create an environmental benefit or limit environmental impact	3
Limit impact from operation and maintenance of the facility (noise, traffic, duration and frequency of maintenance and operation, scale of equipment)	3
Limit disproportionate impacts to individual property owners	2
Limit short-term impacts to parks	1

Please list any other values or concerns SPU should consider:

- *Construction impacts?*
- *Preserve trees, wildlife habitat and the integrity of our parks.*
- *Preserve the aesthetics of the parks it should not look, smell, or sound like a sewage operation*
- *Green/Expand RainWise*

Do you have any other thoughts or questions for the project team?

- *Do something that won't require replacement again in 50-80 yrs. Use storage and a small treatment plant for separated stormwater only.*